

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

DATE: March 15, 2021

TO: State Clearinghouse, Governor's Office of Planning and Research; Responsible and Trustee Agencies; Los Angeles County Clerk; and Other Interested Parties

SUBJECT: Notice of Preparation of a Program Environmental Impact Report and Notice of Public Scoping

PROJECT: Operation NEXT Water Supply Program and Hyperion 2035 Program

LEAD AGENCY: City of Los Angeles - Los Angeles Department of Water and Power and Los Angeles Sanitation and Environment

REVIEW PERIOD: March 15, 2021 through April 14, 2021

This Notice of Preparation (NOP) has been prepared to notify agencies and interested parties that the City of Los Angeles (City), as the lead agency represented by the Los Angeles Department of Water and Power (LADWP) and Los Angeles Sanitation and Environment (LASAN) as joint partners, will prepare a Program Environmental Impact Report (PEIR) pursuant to the California Environmental Quality Act (CEQA) for the proposed Operation NEXT Water Supply Program and the proposed Hyperion 2035 Program (collectively, the Program). As a water reclamation project, the Program is eligible for federal funding under the State Revolving Fund (SRF) Loan Program. In order to comply with the requirements of the SRF Loan Program, which is administered by the California State Water Resources Control Board (SWRCB), an environmental document must fulfill additional requirements known as CEQA-Plus. The CEQA-Plus requirements have been established by the U.S. Environmental Protection Agency and are intended to supplement the CEQA Guidelines with specific requirements for environmental documents acceptable to the SWRCB when reviewing applications for wastewater treatment facility loans under this federal SRF Loan Program. As such, the PEIR will be prepared in accordance with the CEQA-Plus requirements of the SWRCB.

The City is proposing to implement a new advance treated recycled water (ATRW) infrastructure system that would maximize recycled water production at the Hyperion Water Reclamation Plant (HWRP) and construct new treatment, conveyance, storage, and distribution infrastructure to augment local water supplies by up to approximately 217 million gallons per day, equivalent to a third of the city's water supply. The proposed Program would establish an integrated water resource strategy that provides a new local water supply source to sustain the long-term reliability and utility of local groundwater basins and decreases the Los Angeles region's dependence on imported water supplies. To do this, LADWP would increase recycled water treatment facilities, water conveyance pipelines, and groundwater recharge and extraction capacities within the Central, West Coast, and San Fernando Groundwater Basins.

LASAN would install advanced treatment processes for the production of recycled water at HWRP. The Program would also enable future opportunities for direct potable reuse with ATRW supplies produced at the HWRP.

PROGRAM LOCATION: The proposed Program would require installation of new infrastructure throughout the LADWP service area in areas overlying the Central, West Coast, and San Fernando Groundwater Basins (**Figure 1**). New advanced water treatment infrastructure would be installed at the existing HWRP located at 12000 Vista del Mar, in the Playa Del Rey neighborhood within the jurisdiction of the City of Los Angeles. The HWRP is 144 acres in size and is approximately 500 feet from the ocean on a low bluff. The site is bounded to the north by Imperial Highway and Los Angeles International Airport, to the south by LADWP's Scattergood Power Generation Plant, to the west by Vista del Mar and Dockweiler State Beach, and to the east by the residential community of El Segundo that is buffered by a north/south ridge that extends for approximately four miles. New pipelines would be installed to transport the ATRW to groundwater recharge facilities and to existing treatment facilities, as shown in Figure 1, and would encompass cities from the coast to as far north as the Sylmar neighborhood, as far south as Torrance, and as far east as Whittier.

PUBLIC REVIEW AND COMMENTS: The City is soliciting comments from responsible and trustee agencies as well as interested parties as to the scope and content of the environmental information to be included in the PEIR. In accordance with CEQA, agencies are requested to review the proposed Program description provided in this NOP (see Attachment A) and to provide comments on environmental issues related to the statutory responsibilities of each responsible or trustee agency.

COMMENT PERIOD: In accordance with the time limits mandated by CEQA, comments on the NOP must be received no later than 30 days after publication of this notice. Please send your comments in writing by 5:00 p.m. on April 14, 2021. Comments may be submitted via the following:

Mail to: Los Angeles Department of Water and Power
Environmental Planning and Assessment
111 North Hope Street, Room 1044
Los Angeles, CA 90012
Attention: Mr. Christopher Lopez

Email to: OperationNEXT@ladwp.com

Website: Comments can be submitted online through the virtual scoping open house website at www.ladwp.com/operationnext/ceqa.

Telephone: Verbal comments can be provided by leaving a voice message at (213) 367-5808.

Program documents will also be available for download through the virtual scoping open house website at www.ladwp.com/operationnext/ceqa or through LADWP's environmental notices website at www.ladwp.com/envnotices.

A limited number of hardcopies of Program materials will be available, if requested. Please contact Mr. Christopher Lopez at (213) 367-3509.

The following information would be useful to include in your response:

- For all respondents, please provide name and contact information and identify the environmental information and issues that you believe should be addressed in the PEIR.
- For agency respondents, please provide the name of the responsible individual with contact information (mailing address, e-mail, and telephone number). List any potential permit(s) or approval(s) for the Program under your agency's authority and any reasonably foreseeable projects, programs, or plans that may have an overlapping influence with the proposed Program.
- Comments provided by email should include "Operation NEXT and Hyperion 2035 NOP Scoping Comment" in the subject line and the name and physical address of the commenter in the body of the email.

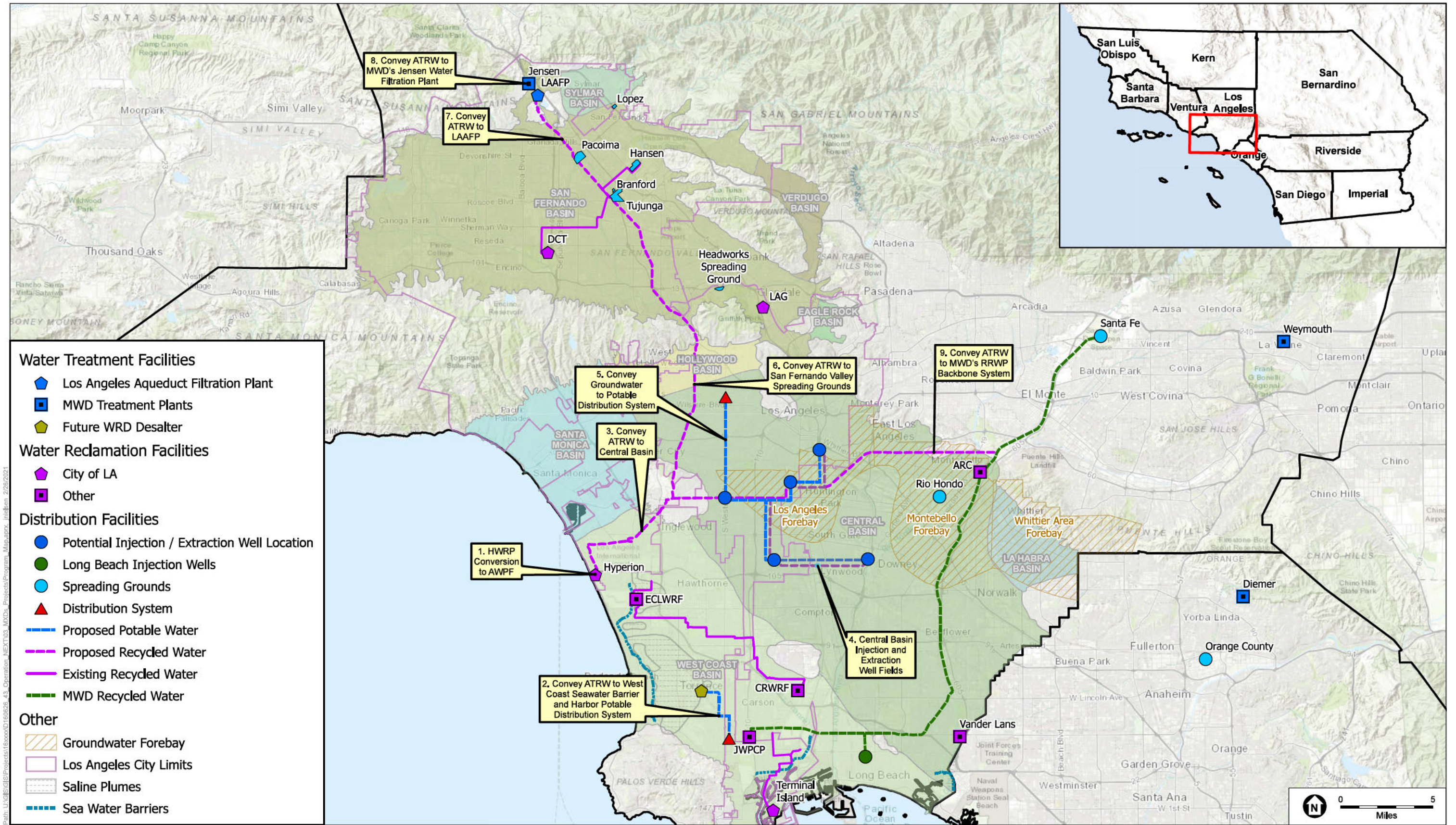
PLEASE NOTE: The City's practice is to make the entirety of comments received a part of the public record. Therefore, names, home addresses, home phone numbers, and email addresses of commenters, if included in the response, will be made part of the record available for public review. Individual commenters may request that the City withhold their name and/or home addresses, etc., but if you wish the City to consider withholding this information you must state this prominently at the beginning of your comments. In the absence of this written request, this information will be made part of the record for public review. The City will always make submissions from organizations or businesses, and from individuals identifying themselves as representatives of, or officials of, organizations or businesses, available for public inspection in their entirety.

VIRTUAL SCOPING OPEN HOUSE WEBSITE: Due to the City's February 2021 SAFER L.A. Order, having an in-person scoping meeting is not possible at this time. In its place, the City created a virtual scoping "open house" website that will be accessible to reviewing agencies and the public for the duration of the NOP review period. The purpose of the virtual scoping open house is to provide an overview of the Program, an overview of the CEQA process, and the timeline for environmental review. Written comments may be submitted anytime during the 30-day NOP review period ending at 5:00 p.m. on April 14, 2021. To access the virtual scoping open house website, please visit www.ladwp.com/operationnext/ceqa or LADWP's environmental notices website at www.ladwp.com/envnotices.



Charles C. Holloway
Manager of Environmental Planning and Assessment
Los Angeles Department of Water and Power

CL:gn



SOURCE: LADWP, 2020; ESA, 2021.

Operation Next



Figure 1
Operation NEXT Water Supply Program and Hyperion 2035 Program

ATTACHMENT A

Operation NEXT Water Supply Program and Hyperion 2035 Program

1.0 Introduction

The City of Los Angeles (City) has established goals to reduce imported water use and increase local water supply to enhance long-term reliability as outlined in the 2015 Urban Water Management Plan (UWMP), Mayoral Executive Directive No. 5, and the City's Green New Deal (Sustainable City pLAn). The goals include the following:

- Recycle 100 percent of wastewater by 2035.
- Source 70 percent of water locally by 2035.
- Reduce per capita potable water use by 25 percent by 2035.
- Reduce LADWP's purchase of imported water by 50 percent by 2025.

To help achieve these goals, the Los Angeles Department of Water and Power (LADWP) and Los Angeles Sanitation and Environment (LASAN) are leading efforts to develop and implement the Operation NEXT Water Supply Program and the Hyperion 2035 Program (collectively, the Program). The proposed Program includes a proposed new advanced treated recycled water (ATRW) infrastructure system that would maximize recycled water production at the Hyperion Water Reclamation Plant (HWRP). The proposed Program would require the construction of new treatment, conveyance, storage, and distribution infrastructure to augment local water supplies by up to approximately 217 million gallons per day (MGD), a volumetric flow rate equivalent to a third of the city's water supply. The HWRP is operated and maintained by LASAN and currently treats an average of 261 MGD. LADWP and LASAN are committed to collaboratively pursuing the planning, engineering design, and construction of an Advanced Water Purification Facility (AWPF) at HWRP to produce ATRW for recycling as well as the many Program components outside of HWRP needed to implement the Program.

Program Background

The amount of groundwater stored in Los Angeles area basins has been in decline for several decades. Lack of precipitation due to drought and the impacts of climate change, as well as a rise in population and commercial activity within the Los Angeles region, and elsewhere, have resulted in an increased demand for and strain upon surface water and groundwater supplies. Declining amounts of surface water and groundwater

reserves make it necessary to identify and utilize new water supply sources to sustain the long-term reliability and utility of local groundwater basins and decrease the region's dependence on increasingly scarce and expensive imported water supplies. To minimize the region's dependence on imported water, the proposed Program would increase recharge and extraction of groundwater reserves within the Central, West Coast, and San Fernando Groundwater Basins and identify opportunities for direct potable reuse (DPR) by maximizing recycled water production from the HWRP.

Over the past several years, multiple studies have evaluated the potential for expanding recycled water production from the HWRP. These studies include the following:

- City of Los Angeles Recycled Water Master Plan (2012).
- Hyperion Reuse Feasibility Study (2016).
- Water Replenishment District of Southern California Groundwater Master Plan (2016).
- One Water L.A. Plan (2018).

In addition, the proposed Program would integrate ongoing efforts to augment the City's use of the Central Groundwater Basin through LADWP's Groundwater Development and Augmentation Plan (GDAP). The goal of the GDAP is to identify methods to optimize use of the Central and West Coast Basins within the established adjudication framework. LADWP is working closely with the Water Replenishment District of Southern California (WRD) to develop the Joint Los Angeles Basin Replenishment and Extraction Master Plan for optimizing the City's groundwater storage and extraction capabilities.

Los Angeles Department of Water and Power

LADWP provides water and power service to a population of approximately 4 million people within the 473-square-mile service area. The City's sources of potable water include local groundwater, the Los Angeles Aqueduct, and imported water purchased from the Metropolitan Water District of Southern California (MWD). On average, LADWP provides approximately 167 billion gallons of water per year to its customers, including residential, commercial, landscape irrigation, and industrial users.

Los Angeles Sanitation and Environment

LASAN operates four water reclamation plants that serve over four million people within two service areas covering 600 square miles. As the City's primary water reclamation plant, HWRP is one of the largest treatment facilities in the world. It has been operating since 1925 and has a capacity of 450 MGD, up to 800 MGD during wet weather. The Donald C. Tillman Water Reclamation Plant located in the San Fernando Valley began continuous operation in 1985 and now provides up to 80 MGD of tertiary treatment. The Los Angeles-Glendale Water Reclamation Plant is located in the eastern San Fernando Valley with a capacity of 20 MGD. These plants provide a combined average daily treatment capacity of 550 MGD. The Terminal Island Water Reclamation Plant built in 1935 in the City's Harbor area now provides full advanced treatment, which allows for

advanced water purification using microfiltration, reverse osmosis, and ultraviolet advanced oxidation. LASAN is actively pursuing other recycled water projects, including the proposed Program, to maximize beneficial reuse of this resource.

Program-Level Analysis, Tiering, and Later Activities

At the time of preparation of the PEIR, design information for the proposed Program is at conceptual level; therefore, several Program components will be presented at a program level and may not include site-specific locations or implementation details. The PEIR will include informed assumptions regarding construction and operational scenarios that can be reasonably made for each component. Accordingly, the environmental impact analysis for some components will include a project-level analysis, while other components may be analyzed at a program-level that is to say at a higher level with less project design detail.

It is anticipated that the City or other agencies may use the PEIR in considering subsequent discretionary actions. The PEIR will serve as the first-tier analysis for later, more detailed, site-specific environmental reviews. When later activities are proposed after the PEIR is certified, a determination will be made at that time by the City: a) whether the activity is covered "within the scope" of the PEIR; and b) if new or worsened significant effects not previously examined in the PEIR could occur. Factors that the City may consider in making the determination of being within the scope of the PEIR could include the geographic area analyzed in the PEIR, consistency of the later activity with the type of allowable land use, and/or overall intensity of development described in the PEIR (CEQA Guidelines Section 15168[c][2]).

If the City determines that a later activity is covered in the scope of the PEIR and new or substantially more severe significant impacts would not occur, no further environmental documentation would be required. If new impacts beyond those disclosed in the PEIR could occur, the City may prepare an addendum to the PEIR or subsequent CEQA documentation (e.g., mitigated negative declaration, or a site-specific supplemental or subsequent EIR), depending on the significance of the impacts (e.g., CEQA Guidelines Sections 15162, 15163, 15164). The subsequent CEQA review would focus solely on new or substantially more severe significant effects that were not considered in the original PEIR (CEQA Guidelines Section 15168[d][2]).

2.0 Program Objectives

The purpose of the Program is to develop a holistic strategy to increase the city's water supply reliability and reduce dependence on imported water through the development of a recycled water program that maximizes production of ATRW from the HWRP, increases recharge and extraction of groundwater reserves within the Central, West Coast, and San Fernando Groundwater Basins, and identifies opportunities for DPR.

The objectives of the proposed Program are as follows:

- Advance the policy goals of the City to increase the development of local water supplies and reduce dependence on imported water.
- Develop a new local water supply through the conversion of the HWRP into a new AWPf.
- Develop conveyance and storage systems to efficiently optimize distribution of recycled water for beneficial reuse in the City.
- Optimize use of the Central, West Coast, and San Fernando Groundwater Basins for storage of recycled water and local production of potable water.
- Cooperatively and collaboratively develop a regional recycled water system with local water agencies, water managers, groundwater pumpers, and municipalities to holistically increase beneficial use of available local water supplies and storage capacity.
- Create an integrated water strategy that improves water security and resiliency in a cost-effective and environmentally sound manner to address the effects of climate change and seismic vulnerability.

3.0 Program Location

The proposed Program would require installation of new infrastructure throughout the LADWP service area in areas overlying the Central, West Coast, and San Fernando Groundwater Basins (Figure 1). Such infrastructure may include: pipelines for conveying water, wells for injecting and extracting groundwater, pump stations, other treatment and appurtenant facilities, and a new AWPf.

The new AWPf would be constructed at the existing HWRP, located at 12000 Vista del Mar, in Playa Del Rey within the jurisdiction of the City of Los Angeles. The HWRP is 144 acres in size and is approximately 500 feet from the ocean on a low bluff. The site is bounded to the north by Imperial Highway and Los Angeles International Airport, to the south by LADWP's Scattergood Power Generation Plant, to the west by Vista del Mar and Dockweiler State Beach and to the east by the residential community of El Segundo that is buffered by a north/south ridge that extends for approximately four miles.

The location of the remaining Program components will be refined as the system is fully designed. New pipelines would be installed to transport the recycled water to groundwater recharge facilities and existing treatment and distribution facilities, as shown in Figure 1, and would encompass the local cities from the coast to as far north as Sylmar, as far south as Torrance, and as far east as Whittier. Table 1 lists cities with the potential to be impacted by the proposed Program's component construction. Please note, the proposed Program is currently in the conceptual design stage and the identified impact areas may change during planning and design.

TABLE 1
CITIES WITH THE POTENTIAL TO HAVE PROGRAM COMPONENTS

Commerce
Inglewood
Los Angeles
Lynwood
Montebello
South Gate
Torrance
Vernon
Whittier
Unincorporated Los Angeles County

4.0 Program Description

The proposed Program would include producing up to approximately 217 MGD of ATRW at HWPR for beneficial reuse. This is equivalent to approximately 243,050 acre-feet per year (AFY) of new water supplies. Local groundwater basins would be used to store the new water supply since aboveground storage of this size would be infeasible within the greater Los Angeles area. A portion of advanced treated water would be conveyed to the Central Basin, with potential water exchanges at MWD's Regional Recycled Water Program (RRWP) Backbone System. The remaining flows would be available to send north to LADWP's treatment and groundwater recharge facilities in the San Fernando Valley. Depending upon LA Aqueduct deliveries, yearly component flows would vary significantly, particularly between the LA Aqueduct Filtration Plant and San Fernando spreading grounds. The Program would include nine major components, which are listed in Table 2 and illustrated in Figure 1, and are further described below.

TABLE 2
KEY PROGRAM COMPONENTS

1. Convert HWRP to include an Advanced Water Purification Facility (AWPF)
2. Convey advanced treated recycled water (ATRW) to West Coast Seawater Barrier and Harbor Potable Distribution System
3. Convey ATRW to Central Basin
4. Central Basin Injection and Extraction Well Fields
5. Convey Groundwater from Central Basin to Potable Distribution System
6. Convey ATRW to San Fernando Valley Spreading Grounds
7. Convey ATRW to Los Angeles Aqueduct Filtration Plant (LAAFP)
8. Convey ATRW to MWD's Jensen Water Filtration Plant
9. Convey ATRW to MWD's RRWP Backbone System

Advanced Water Purification Facility

As a primary component of the proposed Program, LASAN would convert HWRP to include a new AWPf to produce highly treated water compliant with water quality standards for potable reuse. The new AWPf would be located within the existing HWRP footprint and would require substantial redesigning of the facility to accommodate the advanced treatment infrastructure. The new treatment process would include full advanced treatment technologies consisting of, but not limited to micro-filtration or membrane bioreactor, reverse osmosis, and ultraviolet advanced oxidation processes. The upgraded HWRP would be designed to accommodate peak flows, maximize production of ATRW, and maintain the ability to discharge to the existing ocean outfall system as necessary. Space constraints at HWRP may require exploration of off-site options.

Convey Advanced Treated Recycled Water to West Coast Seawater Barrier & Harbor Potable Distribution System

A portion of the ATRW from HWRP would supply the seawater intrusion barrier operated by the Los Angeles County Department of Public Works and help replenish the West Coast Groundwater Basin. This new source of groundwater replenishment would be extracted by WRD's proposed Regional Brackish Water Reclamation Program, which will be covered under a separate CEQA study. A conveyance system would be constructed to convey new water supplies from WRD's proposed extraction and treatment facility to the Harbor area potable distribution system.

Convey Advanced Treated Recycled Water to Central Basin

To convey water to the Central Groundwater Basin, it is estimated that approximately 15 miles of pipeline would be constructed from HWRP to proposed wellfields located in the Central Basin in South Los Angeles. Associated pump stations would be installed along the pipeline route to deliver water. It is estimated that the first 9 miles of pipeline would be approximately 96 inches in diameter and would convey ATRW from HWRP to a tee-junction located near the boundary of the West Coast and Central Groundwater Basin. Flows would then split east further into the Central Basin and north to the San Fernando Valley. The pipeline going east would be approximately 6 miles in length, varying between 54 inches and 66 inches in diameter. This pipeline would have capacity built in to replenish the Central Basin and to continue further east to connect with MWD's RRWP Backbone System. The recycled water would be delivered to injection well locations throughout the Central Basin for groundwater augmentation.

Central Basin Injection and Extraction Wellfields

Once the recycled water is conveyed from HWRP to the Central Basin, additional wellfields and centralized treatment facilities would be required to first inject the ATRW into the underlying groundwater aquifer, and then extract and treat the groundwater prior to distribution into the existing water system. This includes the construction of new injection wells, extraction wells, well collector lines, and groundwater treatment facilities.

The proposed wellfields and treatment facilities may require acquisition of land to house the new infrastructure. Additionally, LADWP plans to construct and operate a new Education and Outreach Learning Center to showcase LADWP's involvement in the community and its efforts to provide safe, reliable, and high-quality water. The devoted public space would include interactive education exhibits and meeting spaces.

Convey Groundwater from Central Basin to Potable Distribution System

Once groundwater in the Central Basin is extracted and treated, a new pump station and potable water pipeline, ranging from 36 inches to 60 inches in diameter, would be required to convey treated water to the existing LADWP distribution system. The location, system demand impacts, and impacts to system operations for this proposed connection are being evaluated as this will allow the potential for LADWP to fully utilize its existing water rights and storage credits within the Central Basin under the current Judgment.

Convey Advanced Treated Recycled Water to San Fernando Valley Spreading Grounds

To maximize the beneficial reuse of recycled water from HWRP, it is estimated that an 84-inch-diameter, 20-mile-long pipeline would be installed to convey ATRW north to LADWP's service area in the San Fernando Valley. The pipeline sizing was assumed to provide operational flexibility in allowing all HWRP flows to be conveyed to the San Fernando Valley. Construction of the pipeline may require tunneling through the Santa Monica Mountains. In addition, new pump stations would be required. Once in the San Fernando Valley, LADWP would use existing spreading grounds for additional storage in the San Fernando Valley Groundwater Basin through infiltration at existing spreading grounds such as Pacoima Spreading Grounds, Hansen Spreading Grounds, and Tujunga Spreading Grounds. Injection wells will also be considered to supplement spreading ground capacity.

Convey Advanced Treated Recycled Water to Los Angeles Aqueduct Filtration Plant

The Los Angeles Aqueduct Filtration Plant (LAAFP) would serve as the primary terminus for ATRW entering the San Fernando Valley. In order to convey the water to the LAAFP it is estimated that a 6.5-mile-long, 78-inch-diameter pipeline and a new pump station would need to be constructed. The new connection to the LAAFP would constitute a DPR project, which would require DPR raw water and source water augmentation regulations to be in place to allow ATRW to supplement the influent of an established drinking water facility. DPR regulations are still under development and are projected to be complete by 2023. These new regulations may require additional treatment of the ATRW.

Convey Advanced Treated Recycled Water to MWD's Jensen Water Filtration Plant

Once the new water source is conveyed to the LAAFP, an opportunity exists for a potential water exchange at MWD's Jensen Water Filtration Plant (JWFP), which is located northwest of and adjacent to LAAFP. A new pipeline and pump station may be constructed to convey water from the LAAFP to JWFP. MWD's facility would provide another potential destination and add redundancy to both agencies' water systems.

Convey Advanced Treated Recycled Water to MWD's RRWP Backbone System

The proposed Program would construct additional pipeline from the Central Basin wellfield facilities to MWD's future RRWP Backbone System. This Program component presents an opportunity for LADWP to partner with MWD and convey a portion of its ATRW into MWD's planned Backbone System as a potential supplemental supply to MWD's RRWP. The pipeline would convey ATRW to the Upper San Gabriel Groundwater Basin. In addition, an opportunity exists for MWD's ATRW produced from the RRWP to flow into the proposed LADWP system. The potential for a balanced water exchange would add flexibility and redundancy to both water systems and could benefit the region holistically.

Program Implementation Phasing

Implementation of the proposed Program would occur in phases, with each component providing an increment of the total Program capacity. Full treatment capacity at the AWPf may be constructed in phases, or may be constructed at once, depending on the ability to convert the existing HWRP within confining space limitations while maintaining existing operational capacity. It is anticipated that the initial phase would provide replenishment water to the West Coast Basin for beneficial use in the southern service area, including the Harbor area. Subsequent phases would include replenishment of the Central Basin, conveyance to the San Fernando Valley to recharge the underlying groundwater basin in route to LAAFP, and, finally, deliveries to MWD's JWFP and RRWP Backbone System.

5.0 Discussion of Environmental Effects

In accordance with Section 15126 of the CEQA Guidelines, the PEIR will assess the physical changes to the environment that will likely result from construction and operation of the proposed Program, including direct, indirect, cumulative, and growth-inducing effects. The PEIR will assess the significance of any adverse physical effects from facilities and activities associated with construction and operation of the Program components. The PEIR will be prepared in accordance with the CEQA-Plus requirements of the California State Water Resources Control Board, required for some federal funding partners to comply with the National Environmental Policy Act (NEPA). The majority of the Program components will be analyzed at a programmatic level

(CEQA Guidelines Section 15168); other Program components with a sufficient amount of detail at the time of the preparation of the PEIR will be analyzed at a project-level (CEQA Guidelines Section 15161). The PEIR will identify any feasible mitigation measures, if necessary to avoid or reduce any significant adverse effects of the Program. The PEIR will also assess a no-program alternative and will evaluate a reasonable range of feasible alternatives to the Program and its components, if such alternatives are needed to avoid or reduce any significant adverse effects of the Program. Consistent with CEQA Guidelines Section 15082(a)(1)(C), the potential adverse physical effects of the Program are summarized below, which in turn will be addressed in the PEIR.

Aesthetics

Although most of the Program components would be located belowground, some facilities such as the HWRP, treatment facilities, and pump stations would be constructed aboveground. Therefore, some components of the Program would have the potential to conflict with applicable regulations governing scenic quality and/or alter the visual character of the Program component sites and their surroundings by converting existing land uses to water system facilities. The PEIR will evaluate the potential for the proposed Program to adversely affect aesthetic resources, including applicable regulations governing scenic quality and/or visual character and quality, scenic vistas, and new sources of light and glare.

Agriculture and Forestry Resources

The PEIR will assess whether the components of the proposed Program would adversely affect agriculture and forestry resources, including determining whether the Program components would be located on lands designated by the state's Farmland Mapping and Monitoring Program as Prime, Unique, or Important Farmland and if the Program sites would be located within agricultural preserves or under Williamson Act contracts. The PEIR will also assess whether the Program components would be located on lands designated as forest land.

Air Quality

Construction of Program components would generate emissions from construction equipment exhaust, earth movement, construction workers' commute, and material hauling. The PEIR will estimate construction-related emissions as well as long-term operational emissions of Program components, including new treatment technologies. The PEIR will evaluate the Program's consistency with the regional air quality attainment plans. In addition, the PEIR will evaluate potential health impacts associated with Program construction and operation emissions to local and regional sensitive receptors.

Biological Resources

The majority of Program components are anticipated to be located on and surrounded by disturbed areas or areas that contain ornamental vegetation in an urbanized area.

Construction at HWRP and operation of the proposed AWPf could affect biological resources in the coastal, nearshore, and marine environment. The PEIR will inventory ecological values of affected areas and evaluate the potential for the Program to affect biological resources, such as sensitive species and critical habitats. The PEIR will evaluate the Program's consistency with applicable Habitat Conservation Plans, local ordinances, and state and federal regulations governing biological resources.

Cultural Resources

The PEIR will assess the potential effects of the Program on cultural resources. The PEIR will inventory archaeological, historic, and culturally sensitive resources and assess the potential for cultural resources to be adversely impacted during construction or operation of Program components, particularly during excavation below the top soil for installation of Program facilities.

Energy

Construction and operation of the Program would result in the consumption of energy resources, especially to treat, pump, and convey water within the Program area. The PEIR will identify potential effects to local and regional energy supplies and capacity due to operation and construction of the new infrastructure. The PEIR will evaluate the energy efficiency of the proposed Program compared with energy demands of importing water to Los Angeles.

Geology and Soils

The Program site is located in a seismically active region. New Program facilities could be subject to potential seismic hazards, such as rupture of a known earthquake fault, seismic ground shaking, or seismic-related ground failure, including liquefaction, landslides, substantial erosion or the loss of topsoil, lateral spreading, subsidence, collapse, and expansive soils. In addition, subsurface paleontological resources could be discovered during construction of Program components, particularly during excavation below the topsoil for installation of Program facilities. The PEIR will evaluate geologic hazards and identify impacts to known and potential paleontological resources in the region.

Greenhouse Gas Emissions

Construction activities would require use of equipment and vehicles that emit greenhouse gases (GHGs). Program facilities would use electric power and potentially other sources of energy, the generation or use of which produces GHGs. The PEIR will quantify GHG emissions associated with proposed construction and operation in terms of carbon dioxide equivalent (CO₂e) emissions and compare Program emissions to regional thresholds of significance. The analysis will consider the collective size of proposed facilities with respect to levels of CO₂e emissions and the energy efficiency parameters of the Program. The proposed Program's consistency with the County of Los

Angeles Community Climate Action Plan (CCAP) and other applicable plans will also be discussed.

Groundwater

The PEIR will identify groundwater resources in the vicinity of the Program and will evaluate potential adverse and beneficial effects from construction and operation of Program components. The PEIR will summarize the potential impacts of injection and extraction facilities on groundwater levels, water quality, existing wells, and water rights. The PEIR will also assess the potential for proposed Program operations to affect the location of contamination plumes and groundwater quality within the Central, West Coast, and San Fernando Basins.

Hazards and Hazardous Materials

Construction of Program facilities would require excavation of the existing ground surface, which could uncover contaminated soils or hazardous substances that pose a substantial hazard to human health or the environment. Construction at HWRP and operation of the proposed AWPf could include the transport, storage, and use of potentially hazardous materials. The PEIR will assess the potential for encountering hazardous materials during construction and operation. The PEIR will also assess the potential for the public or the environment to be affected by accidental release of hazardous materials due to construction and operation of Program components, including the potential for Program construction to be located within City-designated methane and methane buffer zones.

Hydrology and Water Quality

The PEIR will identify surface water resources in the vicinity of the Program and will evaluate potential adverse effects from construction and operation of Program components. Construction at HWRP and operation of the proposed AWPf could affect hydrology and water quality in the coastal, nearshore, and marine environment. The PEIR will include a program-level analysis of the effects associated with operation of Program components. The PEIR will describe the site-specific analysis that will be required once the locations for injection and wells, conveyance pipelines, and related facilities are ultimately determined. The PEIR will also describe site-specific analysis for the change in character of HWRP discharges during construction and operation of the proposed AWPf. In addition, the PEIR will also describe potential effects associated with stormwater runoff and will assess whether construction and operation of the Program will meet regulatory requirements affecting stormwater and avoid significant adverse effects to receiving waters.

Land Use

The PEIR will identify designated land uses applicable to the Program components and will evaluate consistency of the proposed facilities with existing land uses within the affected area.

Mineral Resources

The PEIR will use the California Geologic Survey's guidelines and will consult the areas known as Mineral Resource Zones to determine if the proposed Program lies within a zone that contains mineral resources. The PEIR will describe and identify zones and summarize the relevant information from the state mandated Surface Mining and Reclamation Act of 1975 as part of the proposed Program's regulatory setting in relation to Mineral Resources. In addition, applicable general plans, municipal codes, and any other specific or land use plans will be reviewed to determine if they delineate any locally important mineral resources within the study area.

Noise

Implementation of the Program would include temporary construction work and ongoing operations that generate noise and vibration that could affect nearby residents and other sensitive receptors. The PEIR will describe the local noise policies and ordinances for the jurisdictions within the Program area. The construction analysis will use established modeling methodology (e.g., the Federal Highway Administration Roadway Construction Noise Model and the Federal Transit Administration Noise and Vibration Manual). The PEIR will assess the significance of noise effects, including quantifying potential noise and vibration levels associated with equipment used to construct and operate the Program facilities in comparison to standards and thresholds established in local noise policies and ordinances.

Population and Housing/Growth

The proposed Program would not include the construction of new housing or businesses. As such, the Program would not directly induce population growth. However, the PEIR will analyze the Program's potential to induce indirect population growth due to the creation of new water supply sources.

Public Services

The proposed Program would construct new water facilities for advanced water purification, injection, extraction, and conveyance and is unlikely to affect demand for other public services or to require other new or expanded public facilities. Nevertheless, the PEIR will assess the potential for the Program to affect police and fire protection services, schools, and parks during construction and operation.

Recreation

The PEIR will identify existing recreational areas within the Program area and will analyze potential effects to existing local recreational resources.

Transportation

The proposed Program will temporarily add vehicle trips to local transportation corridors, including material haul trips and construction worker commutes. Additionally, installation

of pipeline within local rights-of-way would require temporary road closures and cause potential disruption of traffic patterns. During Program operations, some additional personnel and additional truck deliveries may be required to operate the AWP at HWRP. The PEIR will analyze whether the proposed Program will conflict with a program, plan, ordinance, or policy addressing the circulation system. The transportation analysis will be conducted using a uniform approach based on the City of Los Angeles Transportation Assessment Guidelines, County transportation assessment guidelines, and other applicable guidelines, including application of the project screening criteria and the Vehicle Miles Traveled (VMT) thresholds. The PEIR will evaluate the effect of the Program on traffic and circulation in the vicinity of the Program site and local and regional roadways during construction and operation.

Tribal Cultural Resources

LADWP regularly conducts Assembly Bill (AB) 52 consultation with local area tribes, and tribes would be solicited for information about tribal cultural resources that may be affected by the proposed Program. Construction of the Program would include ground-disturbing activities. Therefore, there may be the potential for impacts to tribal cultural resources during construction. The PEIR will evaluate potential effects to tribal cultural resources and incorporate the results of AB 52 consultations into the analysis.

Utilities and Service Systems

Many Program components would require subterranean work, with a potential for disruptions to utilities and service systems. The PEIR will evaluate the potential for construction and operation of the Program to result in disruption of existing public utilities, such as water or sewage treatment, electric, natural gas, telecommunications. The PEIR will also evaluate potential effects to stormwater drainage and solid waste disposal systems.

Wildfire

Proposed Program components could be implemented within State Responsibility Areas or lands classified as very high fire hazard severity zones. The PEIR will evaluate the Program's potential impacts related wildfire risk.

Cumulative Effects

The PEIR will include an assessment of cumulative effects for each resource area described above. In particular, cumulative effects to groundwater will be evaluated due to coordinated operation of the Program with LADWP's existing programs and any other neighboring groundwater recharge or recovery facilities operated by WRD, MWD, West Basin, and other agencies. Cumulative effects to marine water quality will consider existing discharges and proposed facilities nearby. The PEIR will include an assessment of cumulative impacts, from air emissions to local air quality and to global climate through GHG emissions.

CEQA-Plus Requirements

Construction of the proposed Program may require federal funding, or elements of the Program may require construction or easements on federally-owned land, which may require NEPA compliance. As a result, the PEIR will be a CEQA-Plus document that analyzes the Program for impacts related to federal laws and regulations, including the Clean Air Act, Coastal Barriers Resources Act, Coastal Zone Management Act, Endangered Species Act, Farmland Protection Policy Act, Flood Plain Management, National Historic Preservation Act, Magnuson-Stevens Fishery Conservation and Management Act, Migratory Bird Treaty Act, wetlands protection, Safe Drinking Water Act, and the Wild and Scenic Rivers Act. These issues will be discussed within the appropriate resource sections listed above. In addition, the PEIR will include an Environmental Justice section as described below. This “cross-cutter” analysis supports federal agencies with their NEPA compliance requirements.

Environmental Justice

The PEIR will include an assessment on the potential for the proposed Program to adversely affect low-income or minority populations disproportionately. The analysis will evaluate construction corridors of the many linear pipeline routes traversing disparate communities. In addition, the location of aboveground water system infrastructure may disproportionately affect disadvantaged neighborhoods. The analysis will document the demographics of affected communities and will evaluate the potential for avoiding, reducing, and mitigating adverse impacts to affected communities.